



JOURNAL OF THE
MINE VENTILATION SOCIETY
OF SOUTH AFRICA

INDEX
TO
VOLUME 37
1984

1. PAPERS

Gases

	Page
Controlling dust and gas in the face area: Operating experience under ultra low-seam conditions Author: S.P. Daft (January)	9
Protection with stonedust barriers on coal conveying roads Author: P.J. Yssel (March)	25
Die uitwerking van verskillende ventilasiestelsels op die gas- en stofkonsentrasie in 'n delwersfront Skrywer: W.J.J. Coetzer (Mei)	49

Heat and Temperature

Virgin rock temperature measurements using thermistors and a digital read out system Author: C.S. Porter (March)	31
Dehumidification of intake air to ventilate the hoist chambers at the Strathmore secondary downcast shaft system Author: J.P. Crafford (April)	37
Practical considerations in the selection of tube materials for evaporators and condensers of refrigeration plants Author: G.H. Corlett (May)	56
The temperature rise of chilled water flowing through pipes Author: R. Ramsden (Published September 1983) Contribution by: M.J. McPherson (May)	58
Some influences on the condensing temperature of a water chiller Author: R.D.C. Shone (June)	61
Contribution by: R. Hemp (August)	94
Author's reply: (August)	95
A direct relationship between sigma heat and wet bulb temperature Author: M.J. McPherson (June)	71
Contribution by: S.J. Bluhm and F. von Glehn (November)	131
The effect of fissure water on the underground environment on Beisa Mine Author: C.J. Roux (August)	86
Performance testing of an energy recovery turbine at a three stage spray chamber Authors: D.W.B. Ferguson and S.J. Bluhm (November)	121
A program to calculate psychrometric data using Hewlett Packard programmable calculators Author: D.M. Walters (November)	126
Cooling the world's coldest mine Author: J. v.d. Walt (December)	138

Dust

Controlling dust and gas in the face area: Operating experience under ultra low-seam conditions Author: S.P. Daft (January)	9
Die uitwerking van verskillende ventilasiestelsels op die gas en stofkonsentrasie in 'n delwersfront Skrywer: W.J.J. Coetzer (Mei)	49

Fans and Airflow

The determination of operating points for fans partially in series or parallel using energy and massflow equations Author: A.E. Hall (February)	13
Ventilation requirements for developing with a tunnel borer Author: B.G.J. de Wet (April)	44
Ventilation problems experienced in the pocket and fender method of pillar extraction at Springfield Colliery Authors: J.D.R. Beukes en G. Hutchinson (July)	73
Ventilation planning for the extraction of deep ore at BCL's Phikwe Mine, Botswana Author: M. Roberts (October)	110
The potential of the centri-axial fan and mixed flow fan for auxiliary underground ventilation Author: B. Grewcock (October)	116

General

Longwall lighting	
Authors: W.H. Lewis, J. Peay, J.C. Yingling and G.R. Bockosh (January)	1
Some factors to be considered in water management	
Author: D.P.M. Venter (February, March)	20, 28
Water in the mining industry (Presidential Address)	
Author: B. Schmitz (September)	97
Measuring instruments	
Author: "Shaft Talk" (October)	115
Errors in measurement	
Author: "Shaft Talk" (November)	125
Mine ventilation in the U.S.A. A brief review of 1983	
Author: P. Mousset-Jones (November)	129
Industrial vacuum cleaning unit	
Author: G.H.C. van Niekerk (December)	133
Some remarkable changes	
Author: "Shaft Talk" (December)	141

2. EXAMINATIONS

Suggested answers to past examination questions	
Author: J.H. Steyn (February, March, April)	22, 34, 47

3. MISCELLANEOUS

25 Years Ago	8, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 143
Retirement: D.F.H. Grave	12
Chamber of Mines examination results	19, 83, 95, 128
News from the mines	21, 48, 68, 107, 119
Registration of Professional Technologists (Engineering)	24
Second U.S. Mine Ventilation Symposium. Call for papers	69
Your Ventilation Society — Message from the President	85
Personality — Mr. S.E. Willows-Munro	90
Call for papers. 1985 Annual Mine Ventilation Society Symposium	107
Hoofartikel — U Maandblad	109
Editorial — Your Journal	109
Changes in Council	109
Mine Ventilation Society — O.F.S. Branch	118
Mine Ventilation Society — Collieries Branch	118
Forthcoming events	119
Farewell to Charles Csatory	130
The 3rd International Mine Ventilation Congress — Impressions	142

4. VISITS AND MEETINGS

Visit by the Collieries Branch to Premier Mine on 25th November 1983	46
Visit by the Collieries Branch to Matla Coal Limited on 2nd March 1984	55
Symposium — The Role of the Manufacturer in Mine Environmental Control, 15th and 16th March 1984	67
Proceedings of the Annual General Meeting of the O.F.S. Branch held on 9th May 1984	70
Visits and Meetings Programme for 1984/85	90
Proceedings of the Annual General Meeting held on 25th May 1984	91
Visit to the Rescue Training Services, Carletonville on 3rd October 1984	119